## SW 000-400

#### BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

Corner 1: North: 1745529.48 East: 3103656.14 (U.S. survey feet) Corner 2: North: 1745529.62 East: 3103594.31 (U.S. survey feet)

Type of monument: Harrison, 4" disk 'Section Corner' Depth: Flush with adjoining ground (both corners)

Indiana tie card references:

IN02\_T19NR1W32\_80 IN02\_T19NR1W33\_72 IN02 T18NR1W05 08 IN02 T18NR1W04 00

#### CORNER WITNESS DETAIL

SCALE 1" = 60'

A - Boone County witness mark, flush, 54.5' to Corner 1, 52.5' to Corner 2

B - Mag nail set in W. side power pole, 2' a.g., 78.1' to Corner 1, 16.3' to Corner 2

C - Mag nail set in E. side wood post, 1' a.g., 57.4' to Corner 1, 45.3' to Corner 2

Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

gravel drive

wire fence

A

County Road 400 West

(1) S.E. Corner, Section 32 S.W. Corner, Section 33 T 19 N, R 1 W

N.W. Corner, Section 4

N.E. Corner, Section 5 T 18 N, R 1 W

Distance between monuments: 61.8'

Original closing dist: 89 links (58.7')

The Harrison monument at Corner 1 was set over a vertical section of railroad rail found. The Harrison monument at Corner 2 was set adjacent to a vertical section of railroad rail

A BCS record dated April 7 & 17, 1884 states, with respect to Corner 1, "Reest'd Rock 16x12x6 +." A BCS record dated April 3, 1870 states, with respect to Corner 2, "Rock at Corner. Fnd from stump of Oak. " A BCS tie card dated September 30 & October 4, 1971 shows Corner 1 as "Stone Found 9/30/71, RRR put in" and shows Corner 2 as "No stone. RRR put in 10/4/71." In Summer, 2016, vertical sections of railroad rail (RRR per the tie card) were found marking both corners. As Corner 1 is the dominant corner, being the standard corner, and as the documentation indicates that the stone was previously found and replaced with a railroad rail, the rail found at this corner was held as marking the corner. The top of the rail was 6 inches below grade, as found in 2016. The rail was left in place and on August 11, 2016 a Harrison monument was broken off at 4 inches, two rebars, 3/8 inch diameter by 24 inches long were driven at angles on the east and west sides of the rail. The top 7 inches of the rail were encased in concrete along with the tops of the 3/8 inch rebars and the shortened Harrison monument was set directly over the top, center of the rail

The rail at Corner 1 was found to be slightly north of the township line connecting Corner 1 with the standard corner approximately one-half mile to the west (see corner NW 000-450). The rail was also approximately 3 feet further from Corner 1 than the original closing distance specified in the federal survey notes. Extensive probing performed in the immediate vicinity of the corner yielded no further evidence of the corner. The position of the rail was held in the east-west dimension. The corner was established on the township line and on October 21, 2016 a Harrison monument was set at this position, 0.8 foot south of the rail, which was left in place and partially encased in concrete.

Corner 1 was originally established as a wood post in 1819. Corner 2 was originally established as a wood post in 1820.

Kenneth E. Hedge, County Surveyo

March 23, 2017

Marion Township

Section 32 Section 33 T19N, R1W T19N, R1W Section 5 Section 4 T18N, R1W T18N, R1W

No. 20200054 No. 20200054 STATE OF MINISTRAL SURVENIENDED SURVENIENDE SU

## SW 000-500

#### BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

Corner 1: North: 1745537.70 East: 3098351.72 (U.S. survey feet)

Corner 2: North: 1745537.76 East: 3098321.60 (U.S. survey feet)

Corner 1 only:

Type of monument: Harrison, 4" disk 'Section Corner'

Depth: flush with shoulder of road

Indiana tie card references:

IN02\_T19NR1W31\_80 IN02\_T19NR1W32\_72 IN02\_T18NR1W06\_08 IN02\_T18NR1W05\_00

#### CORNER WITNESS DETAIL

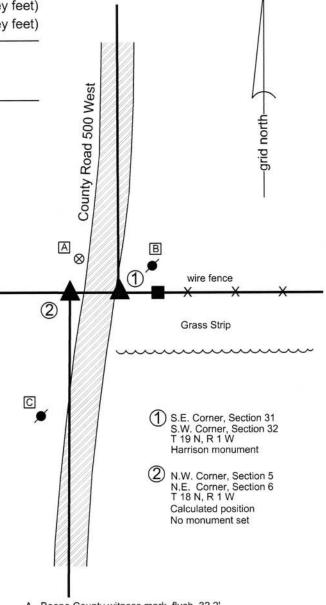
The Harrison monument at Corner 1 was set at a calculated position. No monument was set at Corner 2, as this position falls on an exposed section of metal culvert. The position of Corner 2 is shown as calculated.

No excavation was performed at these corners as the presence of twin culverts indicates that any ancient evidence which may have existed at these corners is no longer present. The position of Corner 2 was established by this office in 1968. A tie card dated September 9, 1968 states "no stone." While the type of monument established that day is not specifically stated, it is known to have been a common practice for BCS field crews to set vertical sections of railroad rails at corners, particularly when the reference remarks are "no stone." The position of Corner 2 was established with respect to deed calls to the corner in both sections 5 and 6. The specific position of the corner was established at the prolongation of a line connecting a railroad rail previously accepted as marking the quarter corner to the south (see Corner SW-050-700 and note that the position held for establishing the corner which is the subject of the current record is that of the railroad rail found during excavation in 2016 but not held as the corner) through a railroad spike found marking the west line of the northwest quarter of section 5 at a point 735 feet south of the subject corner, per calls in Instrument 201300009089 in the Boone County Recorder's Office.

The position of Corner 1 was established in the north-south dimension with respect to the position of Corner 2 and the quarter corner to the east (see Corner NW-000-450). The position of Corner 1 was established in the east-west dimension with respect to the position of the quarter corner to the north (see Corner NW-050-500) and a railroad spike found 448.6 feet north of the corner (deed call of 449.51'), per Document 9601416 in said Recorder's Office. A Harrison monument was set at Corner 1 on September 23, 2016. This monument is directly above a section of metal culvert pipe, but is in sufficient fill to be firmly attached to the ground.

Uncertainites in the north-south dimension of up 1 foot exist with respect to the position of Corner 1 and the previously held position of the corner, per the calls in Document 9601416. Uncertainites of up to 3 feet east-west exist with respect to the relative positions of the two corners, as the original closing distance was 50 links, but the corners, as established herein, are separated by approximately 3 feet less than the original closing distance.

Corner 1 was originally established as a wood post in 1819. Corner 2 was originally established as a wood post in 1820.

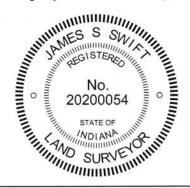


A - Boone County witness mark, flush, 32.2'

B - Mag nail set in S.W. side power pole, 2' a.g., 24.1'

C - Mag nail set in E. side power pole, 2' a.g., 89.3'

Note: ties are to Corner 1 only, which is a Harrison monument set on the east shoulder of C.R. 500 West, adjacent to the roadway. Corner 2 falls on an area of exposed culvert. No monument was set at this position.

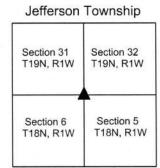


Kenneth E. Hedge, County Surveyor

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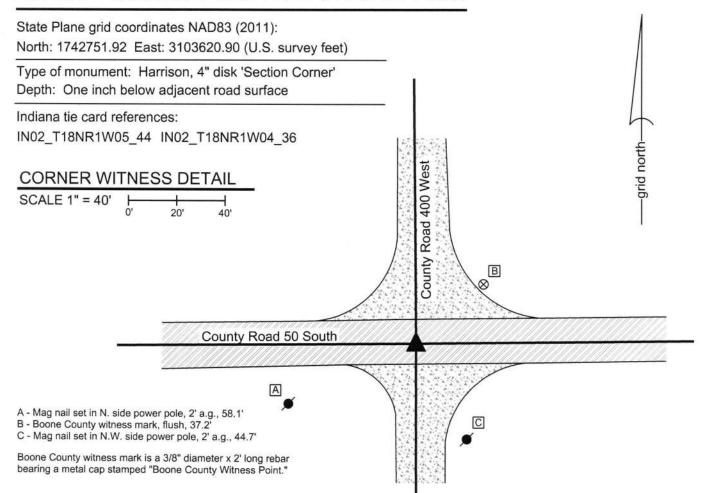
James S. Swift, IN LS 20200054

April 27, 2017



SW 050-400

#### **BOONE COUNTY SURVEYOR'S OFFICE**

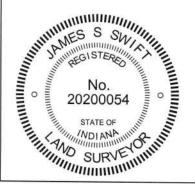


The Harrison monument was set over the etched mark on a stone found.

A BCS record dated October 27, 1873 states, with respect to this corner, "Found from sight tree 8.20 North." A BCS record of July 30, 1900 states "Set 3 cornered rock, 11x9x9x3. Top rock, 14x14x14 +." A BCS tie card August 16, 1968 calls the corner as "No stone."

This corner was excavated on July 14, 2016. Prior to excavation, a vertical section of railroad rail was found at 8 inches deep in a hole in the asphalt at the approximate center of the intersection. It is believed most likely that the railroad rail was set in association with the 1968 tie card. Excavation revealed a stone found north and west of the rail. The stone had a distinct chiseled + mark on top. With the south edge of the stone exposed, it measured 14 inches tall by 14 inches E-W. The full N-S dimension was not measured, though the stone was confirmed to be at least 10 inches N-S at a point 6 inches down from the top and appeared that it would be yet larger further down on the rock. The stone was found to be surrounded by numerous small fragments of rock. The stone had a mounded top and the distinct "+" mark was near the west edge of the top of the stone. The stone appeared to be partially embedded in the clay layer below the road. Due to the presence of the numerous fragments of rock, the lower stone was not detected by probing. The found stone was accepted as being the upper rock called for in the 1900 record and was held as marking the corner. The stone was left in place and a Harrison monument was set over the etched mark near the west edge of the top of the stone. The railroad rail, removed during excavation, had been 2.2 feet east and 1.0 foot south of the mark on the stone.

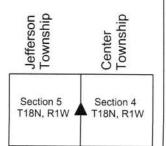
This corner was originally established as a wood post in 1820.



Kenneth E. Hedge, County Surveyor

James S. Swift, IN LS 20200054

March 23, 2017



## BOONE COUNTY SURVEYOR'S OFFICE

# PHOTOGRAPHIC DOCUMENTATION Date of photography: July 14, 2017

The excavation area as the stone was being exposed. The stone is in the upper right corner of the excavation area on this picture.



The stone more fully exposed, view showing the exposed south and east sides.



View from above showing the etched mark on the top of the stone.



For details and documentation, refer to related sheet "Section Corner Record."

The stone partially exposed.



View from the south looking across the stone and north along County Road 400 West.



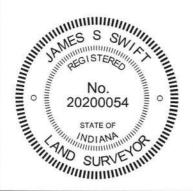
# SECTION CORNER RECORD SW 050-500 BOONE COUNTY SURVEYOR'S OFFICE State Plane grid coordinates NAD83 (2011): North: 1742706.27 East: 3098303.44 (U.S. survey feet) Type of monument: Harrison, 4" disk 'Section Corner' Depth: One inch below adjacent road surface Indiana tie card references: IN02 T18NR1W06 44 IN02 T18NR1W05 36 County Road 500 West CORNER WITNESS DETAIL A 8 County Road 50 South A - Boone County witness mark, flush, 32.4 B - Mag nail set in N. side power pole, 2' a.g., 76.5' C - Mag nail set in N.E. side power pole, 2' a.g., 52.3' Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

The Harrison monument was set over a stone found.

A BCS record dated June 28, 1869 states, with respect to this corner, "Reest from stump of oak and stake set. Rock 12,12,5 ½ + with one under it Rock 9,5 ½, 5 ½ +." A BCS tie card August 16, 1968 calls the corner as "No stone."

This corner was excavated on July 13, 2016. Prior to excavation, a monument which appeared to be a nail with no head was found at 4 inches deep in hole in the asphalt in the approximate center of the intersection. Excavation revealed that the monument is actually a section of ½ inch diameter rebar sharpened to a point at the top. The rebar was situated in the neck of a vertical section of railroad rail, the top of which was 6 inches deep. It is considered most likely that the rail was set in association with the creation of the 1968 tie card. Further excavation revealed a stone found at 16 inches deep, slightly west of the rebar and rail. The stone was embedded in the clay layer below the road, protruding approximately 3 inches into the bottom of the road bed. The stone measured 11 inches E-W by 6 inches N-S and had a distinct etched + mark on the top, slightly N.E. of the high point of the stone. The north, west and south edges of the stone are flat and vertical. The top of the stone slopes toward the east. Though the confirmed dimensions appeared to vary slightly from the record, this variation of up to 2 inches from the record dimensions has been observed at several other corners. The stone was accepted as marking the corner. The stone was left in place and a Harrison monument was set over the top of the stone above a point which is approximately 2 inches south of the etched + and 2 inches east of the high point. The railroad rail, removed during excavation, had been 0.9 foot east and 0.4 foot north of this point.

This corner was originally established as a wood post in 1820.



Kenneth E. Hedge, County Surveyor

James S. Swift, IN LS 20200054

March 23, 2017

Jefferson Township

Section 6 T18N, R1W

Section 5 T18N, R1W

## SW 050-500

## BOONE COUNTY SURVEYOR'S OFFICE

# PHOTOGRAPHIC DOCUMENTATION Date of photography: July 13, 2016

View above showing the etched mark on the top of the stone.



View from the west looking across the stone and east along County Road 50 South



For details and documentation, refer to related sheet "Section Corner Record."

View of the stone from above and east.



View from the south looking across the stone and north along County Road 500 West.



SW 100-400

field entrance

-24" CMP

**BOONE COUNTY SURVEYOR'S OFFICE** 

State Plane grid coordinates NAD83 (2011):

North: 1740115.72 East: 3103630.46 (U.S. survey feet)

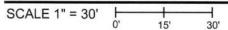
Type of monument: Harrison, 4" disk 'Section Corner'

Depth: Six inches below adjacent road surface

Indiana tie card references:

IN02\_T18NR1W05\_80 IN02\_T18NR1W04\_72 IN02\_T18NR1W08\_08 IN02\_T18NR1W09 00

#### **CORNER WITNESS DETAIL**



A - Boone County witness mark, flush, 13.8'

B - Boone County witness mark, flush, 38.0'

C - Nail in bottle cap found, SW side power pole, 2' a.g., 53.8'

Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

The Harrison monument was set in place of a vertical section of railroad rail found. A BCS record dated January 30, 1864 states, with respect to this corner, "Reest from Elm bearing tree Rock + on side and mark on top." A BCS tie card dated June, 1970 states "no stone."

This corner was excavated on April 12, 2016. Prior to excavation a vertical section of railroad was found at 3 inches deep in the gravel road. Excavation of an area extending 3.5 feet north, 4 feet east, 6 feet south and 6 feet west of the rail revealed no further evidence of the corner. The road bed in this vicinity is only approximately eight inches thick. Excavation was performed to at least twelve inches deep, well into the clay layer below the road bed.

Though not specifically stated in the record, it is believed that the railroad rail was most likely set in association with the creation of the 1970 tie card. The rail fit with local evidence in the form of the north-south roadway and a tree line / field division to the east. The position of the rail also fit reasonably well with respect to the relative positions of proximate corners. The position of the rail was held as the corner. The rail was removed during excavation and replaced with a Harrison monument in the same position.

This corner was originally established as a wood post in 1820.

County Road 400 West

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Section 4

T18N, R1W

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Kenneth E. Hedge, County Surveyo

James S. Swift, IN LS 20200054

March 23, 2017

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Section 8 T18N, R1W

Section 5

T18N, R1W

Section 9 T18N, R1W



SW 100-450

## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

North: 1740071.35 East: 3100959.49 (U.S. survey feet)

Type of monument: Harrison, 4" disk 'Section Corner'

Depth: Four inches above adjacent ground

Indiana tie card references:

IN02\_T18NR1W05\_76 IN02\_T18NR1W08\_04

#### **CORNER WITNESS DETAIL**

wire fence & tree line

wire fence & tree line

No reference distance ties are provided.

The Harrison monument was set at a calculated position based on proximate fence evidence to the north and west.

A BCS record of December 16, 1870 states, with respect to this corner, "Reest from a stake of my former survey and some remains of Beech roots. Rock 15, 9, 3 ½ +." No recent BCS tie cards were found referencing this corner.

Excavation and recon were performed at this corner during October, 2016. A probable position for the corner was calculated at the intersection of the prolongation of fences to the north and west. Neither fence reaches the corner, though both terminate in the immediate vicinity of the corner. The fence to the west terminates approximately 11 feet west of the corner and the fence to the north terminates approximately 30 feet to the north of the corner. Numerous rocks of a variety of sizes were found at the calculated position. The rocks were inspected carefully and none were found to match or approximate the dimensions stated in the 1870 record. No artificial survey monuments such as a rebar or section or railroad rail were found in the vicinity of the corner. The calculated position based on the fences to the north and west was held and a Harrison monument was set at this position. The Harrison monument is embedded in concrete within a 10 inch diameter vertical section of storm pipe which is anchored to a large embedded rock immediately to the west.

This corner was originally established as a wood post in 1820.

No. 20200054

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Kenneth E. Hedge, County Surveyor

James S. Swift, IN LS 20200054

March 23, 2017

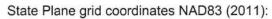
Jefferson Township

Section 5 T18N, R1W

Section 8 T18N, R1W

# SECTION CORNER RECORD BOONE COUNTY SURVEYOR'S OFFICE

SW 100-500



North: 1740064.84 East: 3098296.54 (U.S. survey feet)

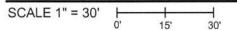
Type of monument: Harrison, 4" disk 'Section Corner'

Depth: One inch below adjacent road surface

Indiana tie card references:

IN02\_T18NR1W06\_80 IN02\_T18NR1W05\_72 IN02\_T18NR1W07\_08 IN02\_T18NR1W08\_00

#### CORNER WITNESS DETAIL



A - Mag nail set in S.E. side power pole, 2' a.g., 37.5'

B - Boone County witness mark, flush, 19.1'

C - Boone County witness mark, flush, 23.4'

Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

The Harrison monument was over a vertical section of railroad rail found.

A BCS tie card dated December 16, 1870 states, with respect to this corner, "Reest from stump; of Sugar. Rock 17, 10, 2  $\frac{1}{2}$  +." A BCS tie card dated August 13, 1968 shows the corner as "Stone Located."

This corner was excavated on July 20, 2016. Prior to excavation, a Mag nail was found at 2 inches deep in a hole in the asphalt. Excavation revealed a vertical section of railroad rail found at 12 inches deep, generally below though slightly southwest of the Mag nail. Further excavation revealed no further evidence of the corner. Though not specifically stated in the 1968 record it is believed most likely that the found stone was removed and replaced with the vertical section of railroad rail at that time. This is known to have been a common practice by personnel of this office during that era. The rail was held as marking the corner. The rail was left in place and a Harrison monument was set over the top of the rail.

This corner was originally established as a wood post in 1820.

500 West

Road

County

C

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No. 20200054 STATE OF NOIANAMENT OF SURVENIENT OF SURVENIE

Kenneth E. Hedge, County Surveyor

James S. Swift, IN LS 20200054

March 23, 2017

Jefferson Township

Section 6 T18N, R1W Section 5 T18N, R1W Section 7 T18N, R1W Section 8 T18N, R1W